

**JPEO-CBD**



# **Joint Program Guardian Advanced Planning Briefing to Industry**

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# Mission



- **Provide 200 DoD Installations with an Integrated CBRN Protection and Response Capability to Protect Personnel, Maintain Critical Military Operations, and Restore Critical Operations as Quickly as Possible**
- **Serves as the Centralized Manager for Equipping Army Installation Support Teams, Army Reserve Recon/Decon Teams and the National Guard Civil Support Teams**

# Homeland Defense Needs



- **Force Protection:**
  - **Combating Terrorism**
    - Anti-Terrorism Activities
    - Terrorism Consequence Management
  - **Active Defense Against CBRN Threats**
  - **Critical Infrastructure Protection**
  - **Consequence/Incident Management**
- **Civil Support Teams:**
  - **Individual Protection**
  - **Analytical Capability**
  - **C<sup>2</sup> Capability**

**“In the New World We Have Entered, the Only Path to Peace  
And Security Is the Path of Action.”**

President Bush, September 2002



## CBRN Installation Protection Includes:

- Detection
- Identification
- Warning and Reporting
- Information Management
- Individual Protection
- Collective Protection
- Medical Protection, Surveillance and Response
- Restoration

**Standard Capability Tailored for Each Installation**



## Detection

- **Government Off the Shelf (GOTS)**
  - Automatic Chemical Agent Detection and Alarm (ACADA) 24/7 (Chem/ Toxic Industrial Chemicals (TIC) Detection)
  - Improved Chemical Agent Monitor (ICAM) (Chem Survey Tool)
  - ACADA (Chem Detection)
  - Dry Filter Unit (BIO Collector)
  - AN/PDR-77 (Rad Survey Tool)
  - AN/UDR-14 (Rad Dosimeter)
- **Commercial Off the Shelf (COTS)**
  - Toxic Industrial Chemical ID
  - Vehicle Radiological Detection
  - Handheld Radiological Identification
  - Electronic TIC Detectors (Classification Device)





## Individual Protective Equipment

- **Government Off the Shelf (GOTS)**
  - M40A1 (Protective Mask)\*
  - MCU-2A/P (Protective Mask)\*
  - Joint Service Lightweight Integrated Suit Technology (JSLIST)\*
  - Footwear – Black Vinyl Overboot
  - Gloves - 7, 14, 25 mil
- **Commercial Off the Shelf (COTS)**
  - SCBA – Self Contained Breathing Apparatus
  - Level A – Protective Overgarment (ex. Trelchem TLU)
  - Level B – Protective Overgarment (ex. Tyvek F)
  - Level C - Protective Overgarment (ex. Hammer/Saratoga)
  - Footwear/HAZMAT
  - PAPR – Powered Air Purifying Respirator
  - Escape Hood (ex. QuickMask 2000)

\*Military Use Only



## Collective Protection

- **Government Off the Shelf (GOTS)**
  - CBRN Filtration System (Filters and Hardware)
  - HVAC System Modifications
  - Entry/Exit Vestibules
  - Limited Building Modifications

## Medical

- **Government Off the Shelf (GOTS)**
  - Surveillance/ESSENSE IV
  - Pharmaceuticals (Self)
  - Pharmaceuticals (Patients)

## Warning

- **Government Off the Shelf (GOTS)**
  - Current On-Base Mass Warning/Notification System
- **Commercial Off the Shelf (COTS)**
  - Leverage Existing Local Area Networks
  - Telecommunications (Cell Phones, Pagers, PDAs)



## Decontamination

- **Government Off the Shelf (GOTS)**
  - Lightweight Decon System
  - M295 Personal Equipment Decon Kit
  - M291 Skin Decon Kit
  - M100 Sorbent Decon System
- **Commercial Off the Shelf (COTS)**
  - Decon Tents

## Information Systems

- **Commercial Off the Shelf (COTS)**
  - Sensors are Integrated and Networked
  - Integrated Hardware and Software Solutions to Support Decision Making and Response Processes



# Technical Challenges



- **Minimizing IPP Footprint on the Installation**
- **Technology Refreshment Insertion**
- **Reduction of Sustainment and Operating Costs**
- **Integration of IPP C4I System into each Installation's Network**
- **Modeling FoS Capability – Measuring System Performance**



- **LSI Contract Award April** **FY04**
- **Commercial Sensors and Equipment – LSI** **FY04-09**  
**Procures via Manufacturers at Least Annually**
- **Government Sensors and Equipment – JPMG** **FY04-09**  
**Procures via Commodity JPMs and RIA at Least Annually**
- **Possible LSI Recompete** **FY07**



- **NGB Civil Support Teams (CSTs)**
  - Responsible for the Development, Procurement and Fielding of the Analytical Laboratory System (ALS) and the Unified Command Suite (UCS)
  - Provide Personnel Protective Equipment, Decontamination and Detection/Identification Equipment to CSTs
  - Program Supports 32 CSTs now
    - 12 Teams Congressional Add in FY04
    - OSD Funded Additional Teams FY05- FY07
- **Reserve Recon/Decon Teams**
  - Program Supports 9 Decon Units and 75 Recon Units now
    - Provide Personnel Protective Equipment
    - Provide Decontamination Shelters
  - Roles and Functions Review may Change Equipment



# Analytical Laboratory System (ALS) Block O



## Mission:

**Provide the National Guard Civil Support Teams (CST's) an Improved Mobility Capability to Conduct Presumptive Detection and Identification Analysis of Unknown or Potential Chemical and Biological Warfare (CBW) Agents and Toxic Industrial Materials/Chemicals (TIMs/TICs) at an Incident Site and Transmit that Information Electronically via the Unified Command Suite (UCS) in Support of the First Responder Incident Commander**



## Status:

- **Fielded to 32 National Guard Weapons of Mass Destruction- Civil Support Team (CSTs)**
- **Fielding to 12 Additional CSTs in FY04**
- **Developing and Executing ALS Block I for FY04 to FY 07**
- **Developing Strategy for ALS Block II for FY 07 to FY10**

## Capabilities:

- **State-of-the-Art Engineering Controls Protecting Operators and Environment**
- **Provides Results from Screening of TIC/TIM/CW Samples within 45 Minutes**
- **Provides Results from Screening of BW Samples within 30 Minutes**
- **Presumptive ID with Biological Hand Held Assays (HHAs)**
- **C-130 Air Transportable**

# Unified Command Suite (UCS) Block O



## Mission:

**The UCS Provides the Reach-back Communications for Connectivity for the Analytical Laboratory System (ALS) with Higher Authority and Technical Support Agencies, Allowing the Civil Support Team (CST) Commanders the Ability to Assess the Incident Scene, Advise Response, and Facilitate Access to DoD Information in Support to the First Responder Incident Commander**



## Status:

- **Fielded to 32 National Guard Weapons of Mass Destruction- Civil Support Team (CSTs)**
- **Fielding to 12 Additional CSTs in FY04**
- **Supporting the Approval Process of the Capabilities Production Document Expected Complete FY04**
- **Developing and Executing Increment I FY04 to FY 06**

## Capabilities:

- **A Self-contained, Stand-alone C-130 Air Mobile Communications Platform**
- **Digital Voice and Data over Satellite Network**
- **NIPRNET, SIPRNET**
- **Radio Remote and Intercom with Cross Banding**
- **Over the Horizon Communication**
- **Interoperable Interface with State Emergency Management and Other Military Units**



# Commercial Off the Shelf (COTS)/ Government Off the Shelf (GOTS)



## Mission:

- To Provide Type Classified and Non-Type Classified Commercial-Off-The-Shelf (COTS) Chemical Biological Radiological Nuclear (CBRN) Life-support Equipment that Directly Protects Individuals from the Effects of CBRN Contamination
- This Entails Personal Protective Equipment (PPE), CBRN Decontamination, or Detection/Identification Equipment



## User:

- The 32 National Guard Weapons of Mass Destruction- Civil Support Team (CSTs)
- Fielding to 12 Additional CSTs in FY04
- The 9 Decon Units and 75 Recon Units
- Equipping the Standing up of a Company in FY04
- Equipping the Standing up of Company's in FY07
- Supporting the Development of Capabilities Documents for COTS Equipment

## Capabilities:

- Man-portable
- TIC/TIM, CWA Detection
- BWA Detection
- Radiological Detection
- Personal Protection
- Decontamination



# Technical Challenges



- **Automation of Analytical Laboratory System**
- **Improved Sensitivity and Specificity of Chemical and Biological Identification Systems**
- **Improved Biological Agent Identification Time**
- **Improved C4I Communications and Interoperability with State Emergency Management**
- **Spiral Upgrade of C2 Systems to stay Relevant**



- 10 Additional CSTs Stand up FY05 - 07
- ALS Block I Upgrade Primary Analytical Equipment Purchases FY06
- UCS Spiral 1 Upgrade FY06
- ALS and UCS Vehicle Replacements FY10\*
- ALS Block II Primarily Focused on Providing Advanced Protection for CST FY10\*

\*Not yet funded

# Summary



- **Most Guardian Activities are Focused on Procuring Readily Available Commodities**
- **Need Industry to focus on Commercializing Existing GOTS CBR Sensors**
- **Opportunities Exist for CST and IPP Efforts**

**Protect the Force**



## Points of Contact



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